#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

### (19) World Intellectual Property Organization

International Bureau



### I COLEA BINISTRI II OTRIBO INSIN ORBIN BERNO DINI I RI NI ORBIN DINODI DERBI INSIDE INI DE SINI DE BINI DE NIST

## (43) International Publication Date 31 March 2005 (31.03.2005)

#### **PCT**

# (10) International Publication Number WO 2005/029833 A2

(51) International Patent Classification7:

H04N

(21) International Application Number:

PCT/IL2004/000867

(22) International Filing Date:

20 September 2004 (20.09.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

158024

21 September 2003 (21.09.2003)

(71) Applicant (for all designated States except US): SERVI-SION LTD. [IL/IL]; 11 Hartom St., Har Hozvim, P.O.B. 45205, 91450 Jerusalem (IL).

(72) Inventors; and

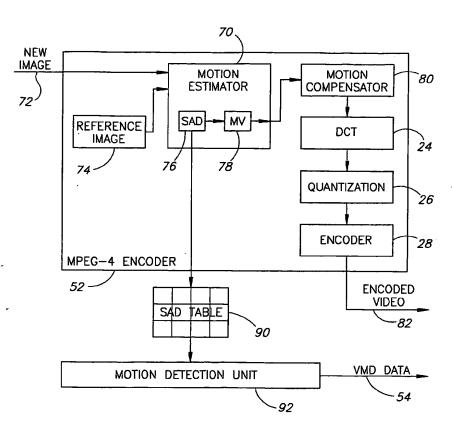
(75) Inventors/Applicants (for US only): HELLER, Dror

[IL/IL]; 14 Chaf Tet November Street, Katamon, 92105 Jerusalem (IL). ROTMAN, Yosef [IL/IL]; Shlomo Avari 23, Jerusalem (IL).

- (74) Agents: SINAI, Henry et al.; 4 Hameyasdim St., 43217 Ra'anana (IL).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: DERIVING MOTION DETECTION INFORMATION FROM MOTION-VECTOR-SEARCH TYPE VIDEO ENCODERS



(57) Abstract: A method and apparatus for detecting motion from a digital video stream using MPEG (Moving Picture Expert Group) compression is provided. The MPEG encoder abstracts the relevant video motion data from the digital video stream and estimates the amount of motion for each of the 16x16-pixel macro-block of a current image frame relative to the corresponding 16x16-pixel macro-block of an image reference frame and determines, from the estimated amount of motion, whether the current frame is a motion frame.



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CII, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

### Published:

 without international search report and to be republished upon receipt of that report